

it is concluded that the packet data disappears.

When detecting the generation of the packet data, the control portion 12 controls the operations of the wireless frame generation portion 11, the modulation portion 13, the spread portion 14, and the transmission amplification portion 16, and executes a transmission start control processing. More specifically, the control portion 12 instructs the wireless frame generation portion 11 to start transmission of wireless frames. In this case, the control portion 12 instructs the four data channels DCH assigned to one call on the transmission start timing different for every one or plural channels.

Besides, on the basis of the SIR given from the reception portion 20, the control portion 12 determines a value to be set for the TPC symbol in the data frame to be transmitted. Specifically, the control portion 12 compares the SIR with a reference value, and determines the increase or decrease of transmission power in the partner station. In order to instruct the partner station on the determined increase or decrease of the transmission power of the partner station, the control portion 12 informs the wireless frame generation portion 11 of bit information corresponding to the increase or decrease, and causes it to be set as the TPC symbol of the control information to be transmitted in a next slot.

Further, the control portion 12 instructs the modulation portion 13, the spread portion 14, and the transmission

amplification portion 16 on the start of the operation. In this case, the control portion 12 controls the transmission amplification portion 16 in accordance with the TPC symbol given from the reception portion 20, and adjusts the transmission power. Specifically, the control portion 12 executes the transmission power control with respect to the packet data and the control information in the wireless frame, individually.

More specifically, with respect to the packet data, in the case where the TPC symbol indicates the increase of the transmission power, the control portion 12 increases the amplification degree of the transmission amplification portion 16 to increase the transmission power by a predetermined constant width. Besides, with respect to the packet data, in the case where the TPC symbol indicates the decrease of the transmission power, the control portion 12 decreases the amplification degree of the transmission amplification portion 16 to decrease the transmission power by a predetermined constant width. Further, with respect to the control information, on the basis of the number Ccode of the data channels DCH assigned to one call, transmission power P_t per data channel, and a predetermined coefficient η ($\eta > 0$), the control portion 12 controls the amplification degree of the transmission amplification 16 to attain the transmission power of $Ccode \times P_t \times \eta$.

The wireless frame generation portion 11 receiving the transmission start instruction generates a wireless frame of a predetermined form on the basis of the packet data and the control information stored in the transmission buffer 11a. For example, as shown in Fig. 2F, the wireless frame generation portion 11 in the base station 2 generates a plurality of wireless frames in each of which a pilot symbol, a data symbol, a TPC symbol, a data symbol, and a TFCI symbol are arranged in this order. The TPC symbol in this case corresponds to the bit information corresponding to the increase or decrease of the transmission power in the partner station informed from the control portion 12.

The wireless frame generation portion 11 selectively gives the plurality of generated wireless frames to the specific modulation portions 13. In this case, in response to the transmission start timing instructed from the control portion 12, the wireless frame generation portion 11 starts the transmission of the wireless frame separately for each of the four data channels DCH. However, the control information in the wireless frame is given to the modulation portion 13 corresponding to the spread code C1 so that it is shared by the four data channels DCH.

The respective modulation portions 13 perform predetermined primary modulation processing such as QPSK (Quadrature Phase Shift-Keying) to the given wireless frames,